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| APPLICATION NO.                      | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--------------------------------------|-------------|----------------------|---------------------|------------------|
| 10/767,386                           | 01/28/2004  | Warren Bruce Jackson | 200312969-1         | 4749             |
| 22879                                | 7590        | 06/09/2008           | EXAMINER            |                  |
| HEWLETT PACKARD COMPANY              |             |                      | PHILIPPE, GIMS S    |                  |
| P O BOX 272400, 3404 E. HARMONY ROAD |             |                      | ART UNIT            | PAPER NUMBER     |
| INTELLECTUAL PROPERTY ADMINISTRATION |             |                      | 2621                |                  |
| FORT COLLINS, CO 80527-2400          |             |                      |                     |                  |
| NOTIFICATION DATE                    |             | DELIVERY MODE        |                     |                  |
| 06/09/2008                           |             | ELECTRONIC           |                     |                  |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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|                              |                        |                       |  |
|------------------------------|------------------------|-----------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b>   |  |
|                              | 10/767,386             | JACKSON, WARREN BRUCE |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>       |  |
|                              | Gims S. Philippe       | 2621                  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 11 March 2008.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-30 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-30 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_.

***Response to Amendment***

1. Applicant's amendment received on March 11, 2008, has been fully considered and entered, but the arguments are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-7, 10-16, 21-25 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Utt et al. (US Patent Application Publication no. 2005/0017924 A1) in view of Yuasa et al. (US Patent no. 6690814).

Regarding claims 1, 21 and 30, Utt discloses the same method and apparatus for displaying facial feature comprising a non-planar surface (See Utt [0038]); an image generation device that creates an image with facial features on the non-planar surface (See Utt [0011, lines 1-5], [0012, lines 2-5]).

It is noted that although Utt provides a positioning system (See Utt [0059, lines 1-10]), it is silent about positioning the image on the non-planar surface to indicate a

direction of gaze and enhance nonverbal communication associated with the facial features.

However, Yuasa discloses a positioning system which positions the image on the non-planar surface to indicate a direction of gaze and enhance nonverbal communication associated with the facial features (See Yuasa col. 8, lines 34-67).

Therefore, it is considered obvious that one skilled in the art at the time of the invention would recognize the advantage of modifying Utt's positioning system by providing Yuasa's positioning system which positions the image on the nonplanar surface to indicate a direction of gaze and enhance nonverbal communication associated with the facial features. The motivation for performing such a modification in Utt is to avoid problems such as not capturing a recognition object in an image, which results in an incorrect pattern recognition extraction as taught by Yuasa (See Yuasa col. 2, lines 47-55).

As per claims 2-5 and 22-25, most of the limitations of these claims have been noted in the above rejection of claim 1. In addition, Utt further discloses the same method and apparatus wherein the non-planar surface has the shape of a head, a sphere, a spheroid, or an oblong closed surface (See Utt [0030], [0034], [0038]).

As per claims 6-7, most of the limitations of these claims have been noted in the above rejection of claim 1. In addition, Utt further discloses the same method and apparatus

wherein the image generation device comprises one or more projectors projecting light from within/outside the non-planar surface (See Utt fig. 1, and 11B).

As per claims 10-16, most of the limitations of these claims have been noted in the above rejection of claim 1. In addition, Utt further project the facial features onto the non-planar surface, wherein the facial features are from human (See [0038], and fig. 12).

It is noted that Utt is silent about the positioning system comprising one or more video collecting devices wherein the collecting devices using the specific camera claimed.

However, Yuasa discloses positioning system comprising one or more video collecting devices wherein the collecting devices including cameras (See Fig. 12, cameras 34 and 42).

Therefore, it is considered obvious that one skilled in the art at the time of the invention would recognize the advantage of modifying Utt by including Yuasa's cameras. The motivation for performing such a modification in Utt is to be able to analyze the facial pattern.

4. Claims 17-20, 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Utt et al. (US Patent Application Publication no. 2005/0017924 A1) in view of Yuasa et al. (US Patent no. 6690814) as applied to claims 1 and 21 above, and further in view of Trivedi et al. (US Patent Application no. 2006/0187305 A1).

As per claims 17-20 and 28, most of the limitations of these claims have been noted in the above rejection of claims 1 and 21.

It is noted that the combination of Utt and Yuasa is silent about a speaker transmitting voice and other sound using microphones.

However, Trivedi discloses a speaker transmitting voice and other sound using microphones (See Trivedi [0138]).

Therefore, it is considered obvious that one skilled in the art at the time of the invention would recognize the advantage of modifying Utt and Yuasa's method and apparatus for displaying facial features by incorporating Trivedi's speaker transmitting voice and other sound using microphones. The motivation for performing such a modification in the combination of Utt and Yuasa is to detect a person's intention as taught by Trivedi (See Trivedi [00138, lines 5-6]).

As per claim 29, most of the limitations of the claims have been noted in the above rejection of claim 28.

It is noted that the combination of Utt and Yuasa is silent about transmitting live video feeds to a remote user.

However, Trivadi discloses a method and apparatus for displaying facial features including the steps of transmitting live video feed to a remote user (See Trivadi fig. 30).

Therefore, it is considered obvious that one skilled in the art at the time of the invention would recognize the advantage of modifying Utt and Yuasa's image generation device by including Trivadi' steps of transmitting live video feed to a remote

user. The motivation for performing such a modification in Utt and Yuasa is to transmit the facial features to multiple users either for security purpose or in a videoconference environment.

4. Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Utt et al. (US Patent Application Publication no. 2005/0017924 A1) in view of Yuasa et al. (US Patent no. 6690814) as applied to claim 1 above, and further in view of Kalt (US Patent no. 6771237).

Regarding claims 8-9, most of the limitations of these claims have been noted in the above rejection of claim 1.

It is noted that the combination of Utt and Yuasa is silent about the image generation method and apparatus using a flexible display as specified in the claims.

However, discloses an image generation method using a flexible display (See Kalt col. 7, lines 37-55).

Therefore, it is considered obvious that one skilled in the art at the time of the invention would recognize the advantage of modifying the display of the proposed combination of Utt and Yuasa by incorporating Kalt's flexible display. The motivation for performing such a modification in the proposed combination is to provide, for example, an extended display area where such a flexible display may be portable and foldable as taught by Kalt (See Kalt col. 7, lines 42-53).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gims S. Philippe whose telephone number is (571) 272-7336. The examiner can normally be reached on M-F (10:30-7:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dastouri Mehrdad can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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